extensions of time are hereby petitioned under 37 CFR §1.136(a), and any fees required therefor are hereby authorized to be charged to our Deposit Account 19-2555.

Kindly enter the following amendment:

IN THE CLAIMS

Please amend the claims as follows:

1. A method for measuring a longitudinal Kerr effect and lubricant thickness on a thin film magnetic disk having a carbon layer, comprising the steps of:

transmitting a light signal toward the magnetic disk at a first angle, said first angle at an angle between zero degrees from vertical and ninety degrees from vertical, said light signal linearly polarized and impinging upon the magnetic disk causing a reflected component of the laser light to be reflected off of the magnetic disk at substantially said first angle and causing a scattered component of said laser light;

receiving said reflected component;

receiving said scattered component;

determining the lubricant thickness based upon the reflected component and scattered component;

measuring a rotation in a plane of the reflected polarized light to determine a magnetic property of the magnetic disk at the point of reflection.

2. (New) A method for measuring a first phase difference between first and second reflected polarized light signal components, the method comprising the steps of:

transmitting a first light signal toward a first object,

separating the first reflected polarized light signal component and the second reflected polarized light signal component from said first light signal reflected off said first object;

detecting a first intensity of the first reflected polarized light signal component;

detecting a second intensity of the second reflected polarized light signal component; and

determining a difference in phase between said first and second reflected polarized light signal components based upon said first and second intensities.

3. (New) The method of claim 2, wherein said first object is one of a magnetic disk and a silicon wafer.

4. (New) The method of claim 2, wherein the step of determining a difference includes:

determining a difference between said first and second intensities to reduce the effects of a texture on said first object.

5. (New) The method of claim 2, further comprising the step of:

determining a thickness of a lubricant on said first object based upon said difference in phase.

6. (New) The method of claim 2, further comprising the step of:

determining a thickness of a carbon layer of said first object based upon said difference in phase.

7. (New) The method of claim 2, further comprising the step of:

determining a magnetic characteristic of said first object based upon said difference in phase.

8. (New) The method of claim 2, further comprising the step of:

polarizing said first light signal to generate a first polarized light signal component and a second polarized light signal component of said first light signal, said first and second polarized light signal components being orthogonally polarized.

9. (New) The method of claim 2, wherein the first and second reflected polarized light signal components are orthogonally polarized.

10. (New) The method of claim 2, further comprising the step of:

measuring the magneto-optic Kerr effect based upon said difference in phase.

11. (New) The method of claim 10, further comprising the steps of:

determining a defect exists at a first location on the first object based upon said first and second intensities; and

marking said first location to identify said defect.

12. (New) The method of claim 11, wherein said marking step further comprises the steps of:

moving a mechanical scribe to a position substantially adjacent to said first location;

positioning said mechanical scribe at substantially said first location; and

marking said first location with said mechanical scribe.

Cont'd A2

13. (New) The method of claim 2, further comprising the steps of:

determining a defect exists at a first location on the first object based upon said first and second intensities; and

marking said first location to identify said defect.

14. (New) The method of claim 13, wherein said marking step further comprises the steps of:

moving a mechanical scribe to a position substantially adjacent to said first location;

positioning said mechanical scribe at substantially said first location; and

marking said first location with said mechanical scribe.

15. (New) A system for measuring a first phase difference between first and second reflected polarized light signal components, comprising:

a light source for transmitting a first light signal toward a first object;

a polarization splitter for separating the first reflected polarized light signal component and the second reflected polarized light signal component from a reflected first light signal that is reflected off of said first object;

a first detector for detecting a first intensity of the first reflected polarized light signal component;

a second detector for detecting a second intensity of the second reflected polarized light signal component; and

a phase determinator for determining a difference in phase between the first and second reflected polarized light signal components based upon said first and second intensities.

Cont'd A2

16. (New) The system of claim 15, wherein said first object is one of a magnetic disk and a silicon wafer.

17. (New) The system of claim 16, wherein said phase determinator comprises:

a texture eliminator for determining a difference between said first and second intensities to reduce the effects of a texture on said first object.

18. (New) The system of claim 15, further comprising:

a thickness determinator for determining a thickness of a lubricant on said first object based upon said difference in phase.

19. (New) The system of claim 15, further comprising:

a carbon thickness determinator for determining a thickness of a carbon layer of said first object based upon said difference in phase.

20. (New) The system of claim 15, further comprising:

magnetic identifier for determining a magnetic characteristic of said first object based upon said difference in phase.

cont'd A2

21. (New) The system of claim 15, further comprising:

Kerr effect determinator for measuring the magneto-optic Kerr effect based upon said difference in phase.

22. (New) The system of claim 21, further comprising:

defect determinator for determining a defect exists at a first location on the first object based upon said first and second intensities; and

a mechanical scribe for marking said first location to identify said defect.

23. (New) The system of claim 22, further comprising:

a scribe positioner for moving a mechanical scribe to a position substantially adjacent to said first location before marking said first location.

24. (New) The system of claim 15, further comprising:

defect determinator for determining a defect exists at a first location on the first object based upon said first and second intensities; and

a mechanical scribe for marking said first location to identify said defect.

25. (New) The system of claim 24, further comprising:

a scribe positioner for moving a mechanical scribe to a position substantially adjacent to said first location before marking said first location.

Cont'd A2

26. (New) The system of claim 15, further comprising:

a polarizer for polarizing said first light signal to generate a first polarized light signal component and a second polarized light signal component of said first light signal, said first and second polarized light signal components being orthogonally polarized.

27. (New) A method for measuring a first phase difference between first and second reflected polarized light signal components, the method comprising the steps of:

transmitting a first light signal toward a first object,

separating the first reflected polarized light signal component and the second reflected polarized light signal component from said first light signal reflected off said first object;

detecting a first intensity of the first reflected polarized light signal component;

detecting a second intensity of the second reflected polarized light signal component; and

measuring the magneto-optic Kerr effect based upon a difference in said first and second intensities.

28. (New) The method of claim 27, further comprising the steps of:

determining a defect exists at a first location on the first object based upon said first and second intensities; and

marking said first location to identify said defect.

29. (New) The method of claim 28, wherein said marking step further comprises the steps of:

moving a mechanical scribe to a position substantially adjacent to said first location;

positioning said mechanical scribe at substantially said first location; and

marking said first location with said mechanical scribe.

30. (New) A system for measuring a first phase difference between first and second reflected polarized light signal components, comprising:

a light source for transmitting a first light signal toward a first object;

a polarization splitter for separating the first reflected polarized light signal component and the second reflected polarized light signal component from a reflected first light signal that is reflected off of said first object;

a first detector for detecting a first intensity of the first reflected polarized light signal component;

a second detector for detecting a second intensity of the second reflected polarized light signal component; and

Kerr effect determinator for measuring the magneto-optic Kerr effect based upon a difference in said first and second intensities.

31. (New) The system of claim 30, further comprising:

defect determinator for determining a defect exists at a first location on the first object based upon said first and second intensities; and

a mechanical scribe for marking said first location to identify said defect.

32. (New) The system of claim 31, further comprising:

a scribe positioner for moving a mechanical scribe to a position substantially adjacent to said first location before marking said first location.

Conclusion

Claims 1-32 are pending in the application. Claims 1, 2, 15, 27, and 30 are the independent claims. Applicants request that the Examiner enter this amendment and consider all pending claims.

Respectfully submitted
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